Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently amended) A mutant strain of mycobacterium comprising in its genome a modified tyrosine phosphatase gene ~~selected from *mptpA* bearing~~ comprising SEQ ID No. 15 ~~and *mptpB* bearing SEQ ID NO. 16~~, the strain being incapable of expressing active tyrosine phosphatase.

2. (Currently amended) ~~A strain as claimed in~~ The mutant strain of claim 1, wherein the mycobacterium ~~strain~~ is of a species selected from the [[a]] group consisting of *M. tuberculosis* and *M. bovis*.

3. (Currently amended) A recombinant vector comprising ~~a modified *mptpA* gene bearing~~ SEQ ID NO. 15.

4. (Currently amended) A recombinant vector as claimed in claim 3, wherein the vector is ~~pAK-A~~ pAkΔA.

5-8. (Canceled)

9. (Currently amended) The recombinant vector of claim 3, further comprising a nucleic acid encoding a second antibiotic marker ~~gene inserted in its backbone~~.

10. (Currently amended) A recombinant vector as claimed in claim 9, wherein the second antibiotic marker gene imparts resistance to ~~an antibiotic selected from~~ kanamycin or gentamycin.

11. (Currently amended) An isolated ~~nucleotide~~ nucleic acid ~~sequence bearing~~

comprising SEQ. No. 15 ~~and representing modified *mptpA* gene~~.

12. (Canceled)

13. (Currently amended) A method for developing a mutant mycobacterium strain comprising a modified tyrosine phosphatase gene in its genome, comprising the following steps:

a. extracting genomic DNA from a mycobacterium strain,

b. amplifying a tyrosine phosphatase gene alongwith flanking sequences using a primer designed from the genomic DNA of step (a) to obtain a DNA fragment,

c. characterizing the fragment of step (b) by sequencing and restriction enzymatic analysis,

d. cloning the fragment of step (b) in a non-replicative vector,

e. modifying the fragment in the non-replicative vector of step (d) by performing a step selected from insertion, deletion mutation or substitution,

f. inserting a first antibiotic resistance marker gene within the fragment of step (e) to obtain a non-replicative vector comprising a modified tyrosine phosphatase gene ~~sleeted from *mptpA* bearing~~ comprising SEQ ID 15 ~~or *mptpB* bearing SEQ ID 16~~,

g. cloning of a second antibiotic resistance marker gene in the backbone of the non-replicative vector of step (f), to obtain a recombinant vector,

h. introducing the recombinant vector of step (g) ~~to obtain~~ into a mycobacterium strain,

i. selecting for primary recombinant mycobacterium strains using the first antibiotic resistance marker gene,

j. culturing the primary recombinant mycobacterium strain of step (i) harboring the first antibiotic resistance marker gene,

k. selecting for secondary recombinant mycobacterium strains of step (j) that are sensitive to the second antibiotic resistance gene present in the vector backbone[[.]],

l. culturing the secondary recombinant mycobacterium strains of step (k), to obtain a recombinant mycobacterium strain harboring the modified tyrosine phosphatase

~~gene which shows defective growth in activated macrophages and animals~~.

14. (Previously Presented) A method as claimed in claim 13, wherein the mycobacterium species is selected from a group consisting of *M. tuberculosis* and *M. bovis.*

15. (Currently amended) A method as claimed in claim 13, wherein, the primer designed in step (b) is selected from any of SEQ ID NO: 1 to 4 for amplification of *mptpA* along with its flanking regions. ~~and any of SEQ ID NO: 5 to 8 for amplification of *mptpB* alongwith its flanking regions~~

16. (Previously Presented) A method as claimed in claim 13, wherein the tyrosine phosphatase gene is *mptpA* gene of SEQ ID No. 11.

17. (Canceled)

18. (Currently amended) A method as claimed in claim 13, wherein step (b) the DNA fragment is a sequence ~~bearing~~ comprising SEQ ID No. 13.

19-20. (Canceled)

21. (Currently amended) A method as claimed in claim 13, wherein the second antibiotic marker gene imparts resistance to ~~the antibiotic~~ kanamycin.

22. (Currently amended) A method as claimed in claim 13, wherein the recombinant vector is ~~pAK-A~~ pAKΔA.

23. (Canceled)

24. (Previously Presented) A method as claimed in claim 13, wherein the vector is introduced by electroporation or through phages.

25. (Canceled)

26. (Currently amended) A method as claimed in claim 13, wherein in step (k) the secondary recombinant mycobacterium strain is ~~resistant to hygromycin or chloramphenicol but~~ sensitive to the second antibiotic kanamycin.

27. (Currently amended) A primer comprising SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, or SEQ ID NO:4~~sequence adapted for amplification of *mptpA* gene selected from any of SEQ ID No. 1 to 4 alongwith its flanking regions~~.

28. (Canceled)

29. (New) The mutant strain of claim 1, wherein the modified tyrosine phosphatase gene *mptpA* consists of SEQ ID NO:15.

30. (New) The recombinant vector of claim 3, consisting of SEQ ID NO:15.

31. (New) The primer of claim 27, consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, or SEQ ID NO:4.